W1TKZ

The Spark Gap

September 1987

Book XII Vol IX

Official Journal of the Wellesley Amateur Radio Society

President's Message

by Tom Kinahan, N1CPE

I can't believe summer is over already. We've had many things accomplished over the summer this year, and this issue of the Spark Gap is devoted to reporting to you the results of these accomplishments. We will not stop there though, we have many new and some regular events planned for this club year. First thing, this month, is the September VHF contest on the 12-14th, our FCC exam session and Novice Celebration Weekend on the 19th and 20th and the Museum of Science Exhibit on the 26 and 27th. Check out the Massachusetts Simulated Emergency Test in October, and November Sweepstakes.

My mailing address and phone number are changing on September 1st so please contact me at the following address and number after then : 25 Queens Way, Apt 7, Framingham, Ma. 01701 and the phone number after September 1st is 877-3456.

73, Tom Kinahan, N1CPE

Officers

As voted at the June 18th meeting, the club officers for this year are :

President:	Tom Kinahan, N1CPE
Vice-President:	Rita Baker, N1DDI
Corresponding Secretary:	Kathy Pate, KA1IYR
Recording Secretary:	Roger Smith, W1EOA
Treasurer:	C.J. McDonald, WB1BUM
Fund Raising Chairman:	Dave Kent, N2AWG
Operations Chairman:	Vern Valero, ND1Z

Museum Of Science

The Boston Museum of Science is again having amateur radio weekend this year on September 27 and 28. W.A.R.S. is participating in the event as are many other Eastern Mass. Amateur Radio clubs. If you have experience in Packet, ATV, Satellites, or Message handling, please contact Tom Kinahan, N1CPE about helping out. Additionally, I am the coordinator of the message handling booth, and hope that as many of you that can are able to help in that effort, even if you've never done it before. An explanation of traffic handling and how the NTS works is planned for the first meeting in September. I need people to operate radios to send the traffic, some typists to enter the messages into a packet system, bookeepers to keep track of what has been sent, and staff to interface with the people to answer questions about third party traffic. We will use 75m SSB and 144 and 220 MHz packet and 2m FM to distribute traffic from the museum. Right now, I need leads on getting the following equipment for the 'Message Center' : 2 complete packet stations, 1 on 220 and 1 on 2m.

Tom Kinahan, N1CPE

June VHF Contest

This June's VHF contest was by far our most sucessful effort ever! The event was marked by some outstanding e-skip on 6 meters. A reproduction of our six meter grid square map is included in this issue indicating where we worked. There were only about 2 or 3 hours that 6 meters wasn't open during the whole contest. In fact, we recognized that there were fewer people on some of the other bands due to the incredible openings on 6. On 6 meters, we worked the Cayman Islands, Bermuda and Baja California in (continued)

MEETINGS THIS MONTH:

September 3, 1987 at 7:30 P.M.
September 17, 1987 at 7:30 P.M.
211 Washington St., Wellesley

addition to the abundant US and Canadian stations.

In addition to 50 MHz, we were active on 144 MHz, 220 MHz, 432 MHz, 903 MHz, 1296 MHz, and 10,000 MHz. In post contest comparisions, we did quite well against some of the other 'big guns'. The Antique Sports Car Club of America race up the Equinox Sky Line Drive was sucessful for all except for the very first entrant on Saturday morning. He piled his $60,000 car into the woods and totaled it. No injuries were reported.

Special thanks to Arnie Adelman, W1GCI for all his effort in getting stations on the air.

The following people were spotted at Mt. Equinox for one time or another and either participated in the contest effort or the car race communications or both :

Vern Valero ND1Z, Chuck Fisk KB1WI, Tom Kinahan N1CPE, Ged Weare NF1Z, Arnie Adelman W1GCI, Art Holmes WA2TIF, Jeff Klein WA2TEO, Dave Kent N2AWG, Scott Nacey WA1YOJ, Dick Paret WA1ZLQ, C.J. McDonald WB1BUM, Paul Monroe KA1LDV, Mike Karp KA1LQK, Bill Hanlon N1ADY, Jon Freeman KA1NDX, Mort Cohan KA1IU.

We've been informed that the results of the logs of stations in the June VHF QSO party, will be the data for some sort of scientific study printed in the September 1987 QST. This issue will also contain results of this event.

Now for June 1987 results. In parenthesis are June 1986 totals:

Band	# QSO's	# Grids
50 MHz	717 (456)	203 (140)
144 MHz	518 (453)	48 (49)
220 MHz	78 (74)	33 (27)
432 MHz	133 (162)	37 (35)
903 MHz	13 (8)	6 (6)
1296 MHz	36 (33)	19 (15)
10000 MHz	2 (3)	2 (2)

SCORE: 1497 (1189) QSOs, 348 (274) Grid Squares, 629,880 (415,562) POINTS

Congradulations Dick ! !

Congradulations to WARS member Dick Brodeur, N1ETC (formerly KA2PGY) for his USA-Counties Award. Dick worked and verified 500 counties all-CW and has received USA-CA # 2183. Nice going, Dick.

Donations needed for Handi-Hams

The local chapter of the Handi-Hams organization is trying to develop a pool of funds to be used to purchase VHF and HF equipment which will be loaned out for as long as necessary to new Handi-Hams in our area.

VHF equipment was recently purchased and presented to a disabled YL who is currently studying for her license in the Weymouth, Ma. area. Donations given for this cause would be used to pay off that equipment, and the remaining funds would be put towards other equipment for future Handi-Hams whom we hope to help get involved in this wonderful hobby.

Donations of working used VHF and HF equipment would also be welcomed. Whatever you can donate towards this cause will be greatly appreciated. Checks may be made payable and sent to: Towne Conover - Handi-Hams, 203 Main Street, Acton, Ma. 01720.

In addition we are also trying to establish an on-going list of volunteer Handi-Ham's helpers for the Greater Boston area. These folks would become Elmers to disabled individuals in their specific area who are interested in obtaining their Ham licenses. So if you think you would like to get involved and be a teacher of CW/theory, or if you could do some of the physical work of setting up equipment/antennas, or perhaps be on the VEC team which administers exams to the Hand-Hams - let us know. For further info contact: W1QLT, Towne, 623-8742 in Acton or KA1IYR, Kathy, 785-1801.

Calendar ! ! !

- September 12-14 : September VHF Contest .. Mt. Equinox, Vt .. FN33
- September 19 FCC Exam .. All Classes .. Wellesley Red Cross .. Special Events Station W1TKZ .. Our own version of Novice Enhancement Weekend !
- September 26-27 : Amateur Radio at the Science Museum, Boston, Ma.
- October 4 : Wellesley A.R.S. Flea Market .. Wellesley High School .. 9 A.M. to 2:30 P.M.
- October 17 : Wellesley Veterans Parade .. 10 A.M.

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

Editor:

Jon Freeman

17 East Meadow Road

Lowell, Ma. 01854

The **Spark Gap** is a monthly publication of the Wellesley Amateur Radio Society, its sole purpose is to keep its members abreast of current happenings, FCC rule & regulation changes and to list equipment offered for sale or trade by members. Members are encouraged to contribute to the **Spark Gap** and may send their articles to the editor's address or to the club address. Items printed in the **Spark Gap** may be reprinted by other Amateur Radio publications provided the author and the **Spark Gap** are given credit.

The Wellesley Amateur Radio Society is a non-profit organization dedicated to the promotion of Amateur Radio through instruction, fellowship, demonstration and participation. Annual membership in the society is $10 and the club year runs from September 1 through August 31. Amateur Novice through Advanced classes are conducted regularly at no cost. To enroll in a class or gain information about the Society in general, write :

The Wellesley Amateur Radio Society

211 Washington Street

Wellesley Hills, Ma. 02181

Net !

Don't forget the W.A.R.S. net on the Wellesley 2 meter repeater, 147.03 MHz, at 8:00 P.M. E.D.T. every Wednesday night.

Renewing Your ARRL Membership

If you're renewing your ARRL membership, please send your completed ARRL membership form (check QST) and your check made out to the Wellesley A.R.S.. Send the check and form to the club at 211 Washington St. Wellesley, Ma. 02181. We will then forward this to the ARRL on your behalf. This way, we are able to make $2 from each renewal.

Special Events

We will be operating W1TKZ on September 19 from 9AM to 9 PM as a special events station to celebrate the new Novice privledges. The frequency will be near 28.350 Mhz, Upper Side Band. We will accept calls in any legal mode, but Novices are only allowed SSB and CW in this region.

Please drop by during the day to help operate the special events station or log-in contacts. The operation will be at the Red Cross with our usual HF equiptment. Operating a special events station is more relaxed and personable than contest operating. Please give it a try!

30th Scout JOTA

The 30th annual Scout Jamboree On The Air (JOTA) is scheduled for the weekend of October 17 and 18. This event is sponsored by the Greater Boston Council, MetaCom District and will take place at the Hale Reservation in Westwood. This event is traditionally held every year during the third week of October. The event will encompass various modes of Amateur Radio and will include CW, voice, Packet, RTTY and slow scan TV. Approximately 200 scouts will participate and will come from a number of local areas such as Dover, Needham, Westwood and Dedham.

Ham radio operators are needed to help with the event. (Rumor has it that the Hams have as much fun in this event as the scouts.) Also, donations of used equipment (receivers, code oscillators, keyers, etc.) would be appreciated. Interested persons should contact : Jim Bond, KA1ANT in Needham, 444-0376.

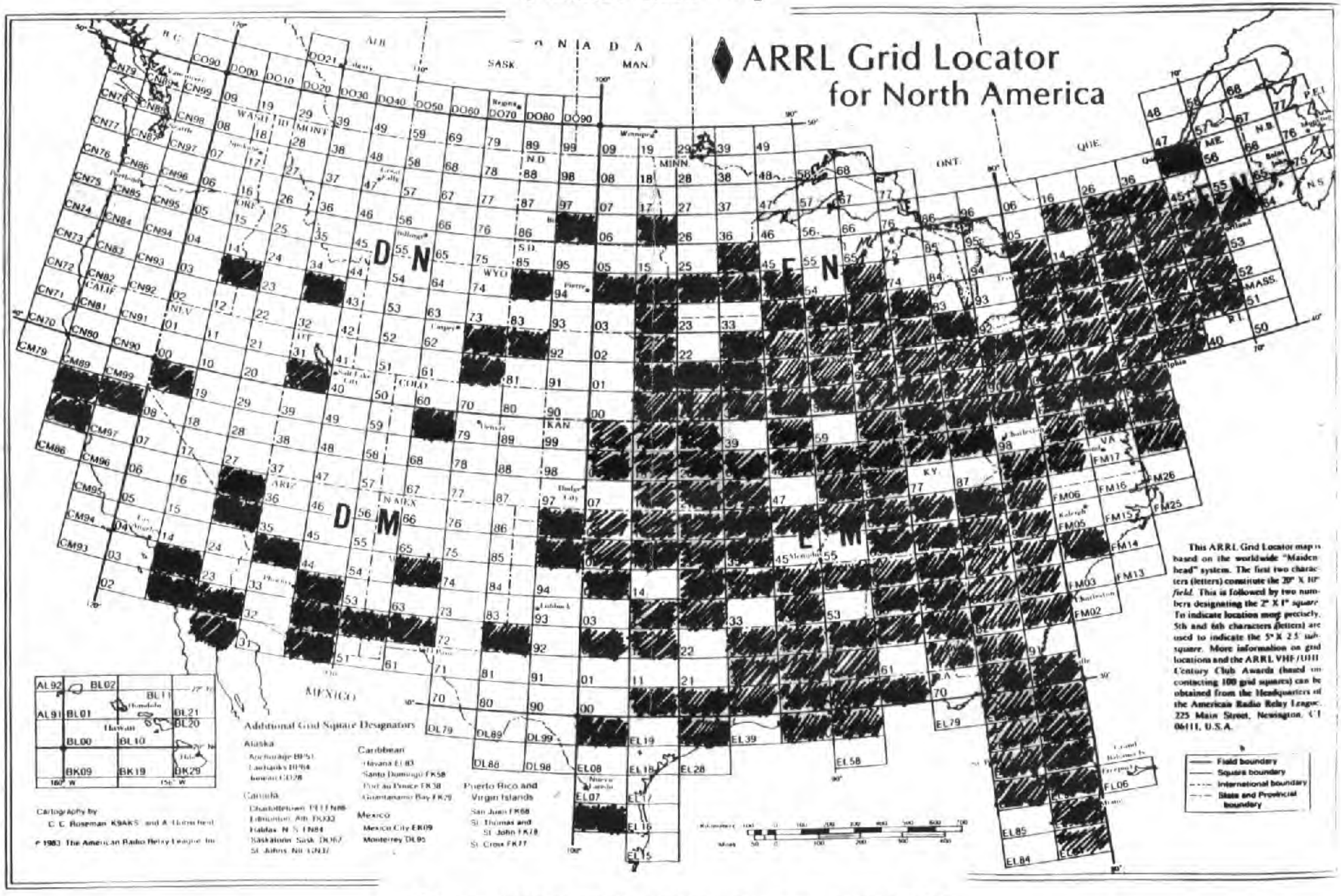
Repeater

The day we've all been waiting for has come and gone. The new repeater antenna was (continued)

OFFICERS

President
Tom Kinahan, N1CPE, 898-2749
Vice President
Rita Baker, N1DDI, 481-0863
Recording Secretary
Roger Smith, W1EOA, 235-6239
Corresponding Secretary
Kathy Pate, KA1IYR, 785-1801
Treasurer
C.J. McDonald, WB1BUM, 332-6091
Fund Raising
David Kent, N2AWG, 875-2126
Operations Chairman
Vern Valero, ND1Z, 533-6822

6 meter Grid Map


ARRL Grid Locator
for North America
CANADA
MEXICO
Additional Grid Square Designators
Alaska
Canada
Caribbean
Mexico
Puerto Rico and Virgin Islands
This ARRL Grid Locator map is based on the worldwide "Maidenhead" system. The first two characters (letters) constitute the 20° X 10° field. This is followed by two numbers designating the 2° X 1° square. To indicate location more precisely, 5th and 6th characters (letters) are used to indicate the 5' X 2.5' subsquare. More information on grid locations and the ARRL VHF/UHF Century Club Awards (based on contacting 100 grid squares) can be obtained from the Headquarters of the American Radio Relay League, 225 Main Street, Newington, CT 06111, U.S.A.
Field boundary
Square boundary
International boundary
State and Provincial boundary
Cartography by
C. C. Roseman, K9AKS, and A. Hornstrup
© 1983 The American Radio Relay League, Inc.

June 1987 VHF QSO Party - W1TKZ

installed at the Newton-Wellesley Hospital, on Saturday, July 11th. This allows us to run the amplifier purchased with the repeater, but until now unused due to desense problems. Initial indications are that the range is tremendously improved. We have reports of working the repeater in Salem, N.H., in town Boston on a walkie, Wrentham on a walkie, Westborough around town, Lowell reliably. Please check out the range on the repeater and let us know what you find. Presently the repeater is configured with 100 watts into the duplexer, 75 out of the duplexer into the feedline. We figure the loss of the feedline combined with the gain of the antenna to make a 4dB gain antenna system. Thus, the ERP is 188 Watts. The flakiness of the repeater is also gone.

Thanks to the Crew that helped transport and erect the antenna : C.J. McDonald WB1BUM, Dave Kent N2AWG, John Antes KB1EB, Jon Freeman N1EYU, Paul Davis N1EGC, Jason KA1NML, Vern Valero ND1Z, Jed Weare NF1Z, Duke Hoang NA1A, Thomas Burton KX1H.

Equipment Inventory

HELP us with our W.A.R.S. equipment inventory !!! If you have W.A.R.S. equipment on loan please send a card to the club address with 1) type of the equipment 2) manufacturer/model #'s 3) description 4) serial #'s.

VEC Exams

- September 19 ... Wellesley ... contact, KZ1D, 460-9059 ... register by 9/15
- September 23 ... MIT ... contact, WA2EYC, 646-1641 ... register by 9/21
- September 26 ... WPI at 9 A.M., Novice-Extra ... contact Bob, NA1Q, 793-5435
- October 6 ... Acton ... contact, W1QLT, 263-8742

Congratulations

Dave Kent N2AWG, and XYL Maria are the proud parents of Alexander David DeFelice-Kent born July 7th. Congratulations !

FCC EXAM

FCC Exam All Classes Of License

PLACE: Wellesley Red Cross Building
DATE: Saturday SEPT 19, 1987
TIME: 10 AM
BRING: Form 610, original and 1 copy of your ham license, and check for $4.30 payable ARRL/VEC

CONTACT: Dan Brevik (460-9059) by Sept 12.

Field Day

Field Day was held the 26 and 27 of June at the Sprague School in Wellesley. As promised, W1TKZ was 15A on a total of 17 bands. We managed a cross band QSO with a MARS station, a QSO on the brand new Russian Satellite RS10, erected a rhombic antenna for 10 meters and made 509 total contacts.

The weather didn't cooperate too much during setup. It rained all day Saturday of FD until about 5:30pm, just in time for the FD Barbeque! Sunday was a glorious dsunny day. Mort Cohan, KA1IU can now certainly be considered the master of the wire antenna with the 250 foot long rhombic. This thing was quite a sight! While working what he could on 10 with the fancy antenna, Mort popped back and forth looking for the Russian satellites. Finally he found RS10. On the very next pass, 90 minutes later, he tried to work it using a 10 watt all mode 2 m rig on the ringo ranger we had been using for packet, but nobody answered W1TKZ CQs. So the next morning, Mort returned with a 100w 2m amp, and using the same ringo ranger antenna, worked Long Island, NY via RS10! He also worked 60 stations on 10m Phone.

Mike Karp, KA1LQK, brought over his fancy Yaseu 767 and used it on 75m phone for most of the weekend, and racked up the award for most contacts on a band (135) including working MARS station NNN0DAM crossband.

Thomas Burton, KX1H put together his 15m dipole for cw and worked 18 stations from his station which was in the trunk of his car! (He was outside the trunk)

Jerry Driscoll, KA1OOO used the baseball backstop and a 20 foot mast to support either end of his 20m dipole for CW. Jerry and his station worked 26 stations on 20m CW.

Jon Freeman, N1EYU put together a 15m Sloper and worked 63 stations.

Dan Brevik's rig on 40m worked 42 stations on 40m phone through the European broadcasters.

Vern Valero, ND1Z broke the WARC barrier and had stations on 12m but managed 3 contacts on 12m phone but none on cw due to antenna problems...

Joel Sturman, KA1QIY handled the 220 and 440 MHz FM front.

Our 6m antenna, a dipole, was a little disappointing. We heard only one station, and worked them with some trouble, but the antenna seemed to have many problems, because the station was only 5 miles away, and that station worked people into 8 land easily.

We had at least 1 station on every ham band from 80 to .70 m with the exception of 30m which is not allowed for FD.

I know I'm leaving a few stations out, but all of the stations were critically important to the entire FD operation.

It was a weekend for inventive antennas, some rain, and lots of radio. Thanks to all that helped : Nels Anderson K1UR, John Antes KB1EB, Peter Borner KA1PQY, Dan Brevik KZ1D, Thomas Burton KX1H, Mort Cohan KA1IU, Jerry Driscoll KA1000, Jon Freeman N1EYU, Bill Furbish N1EHM, Joe Green K2VUI, Neil Grossman KA1PPG, Dick Paret WA1ZLQ, Bill Hanlon N1ADY, Mike Karp KA1LQK, Tom Kinahan N1CPE, Greg Livingston WA2EHV, C.J. McDonald WB1BUM, Paul Monroe KA1LDV, Rich Vitello WA1EQU, Doug Cooper KA1LPF, Jason KA1NML, Roger Smith W1EOA, Frank Stuart WA1WNR, Joel Sturman KA1QIY, N1EYZ, Liz Valero KA1PNA, Vern Valero ND1Z, Bill Welch K1CLN, Bill Emerson WA1EVD, Duke Hoang NA1A, Sally Hanlon, Tom Kinahan SR., Mrs. Sturman, Mr. Sturman.

Telephone Bulletin Boards

Following is a list of telephone bulletin boards that have amateur radio listings.

Cul-De-Sac 429-1784 (Holliston)
Heath/Zenith 237-1511 (Wellesley)
Unicorn's Inn 479-3432 (Quincy)
Lion's Den 889-0777 (Chelsea)

All of the above currently offer free use.

Below is one that is dedicated to Amateur Radio and will make your long distance telephone company smile.

N9HH BBS (618)286-0251 (St.Louis,MO)

Ones that I haven't tried yet:

73 Magazine (603)924-9809 (New Hampshire)
— (2100Z to 1200Z weekdays only)
Stateline (603)424-5497 (Merrimack NH)
— perhaps evenings only.
Bit-By-Bit 565-9136 (Boston)
— perhaps evenings only.

Roger Tobin

12 Meter Fans

I would like to hear from folks who have the capability for and enjoy using the 24 Mhz band. This new WARC band would seem to be a lot like 15 meters, but then maybe is 10 meter-like as well. Perhaps we can start a net to use the band and catch some openings together. Who knows, we could make some interesting propagation discoveries? contact: Vern Valero ND1Z, 533-6822, 147.03/63 Repeater, K1UGM BBS.

Biathalon Into Summer

On May 31st, the Wellesley A.R.S. provided safety communications for the Biathalon Into Summer sponsored by the Wellesley Raquet Club. The event included a 5 mile run followed by a 20 mile bike ride.

No emergencies were encountered fortunately, even though it was a warm 95 degree day. Traffic control was considered a problem, but nobody was hurt. Thanks to the following for helping out : Kevin Kelly (WA1YHV), Lou Morotta (N1EHI), Bill Furbish (N1EHM) and son, John Antes (KB1EB), Neil Grossman (KA1PPG), Joe Green (K2VUI), Vern Valero (ND1Z), Art Thompson (KA1ENP), and Tom Kinahan (N1CPE).

Flea Market

The Wellesley A.R.S. Flea Market is planned for October 4th at the Wellesley High School parking lot 9am to 2:30pm. Talk it up and let all your friends know.

Wellesley Veterans Parade

The Wellesley Veterans Parade is scheduled for October 17th at 1pm. The organizing committee has again asked us to participate in getting the parade off the ground as in past years. If you are available at around 10am on October 17, let Tom Kinahan know so you can get on the list of operators of this fun event.

Scuttlebut at the Heavy Hitters Hamfest

Many of you were in attendance at the Heavy Hitters Hamfest on July 25 and 26, but more was going on than just a flea market. The flea market, by the way, was ok, not outstanding, but I gained some insight at the various forums. The first forum that I went to, was weather related, and the predictions are for a heavy snowfall again this winter.

The AMSAT forum was very interesting and was hosted by Andy Deskur, KA1M. He gave a presentation on the history of amateur satellites, discussed the present state, with OSCAR-10 and RS-10 and RS-11 (RS-10 and RS-11 are on the same package, share power, but are two totally different units). RS-10 and RS-11 have 15m uplinks and 10m downlink in addition to 2 m uplinks. Phase III-C could be launched as early as this fall if all goes right for ESA. Phase III-C is a satellite very similar to OSCAR 10 in orbit, but has additional capabilities. AMSAT is working with NASA to have a permanant amateur station on the new space station when it goes up.

The ARRL forum was a report by Tom Frenaye, K1KI New England Division Director on the present happenings at the League. The museum project has been put on the back burner for some other time. The ARRL issuing special callsigns was discussed. Basically, The ARRL supports people being able to get secondary callsigns for special events, for clubs, or other reasons, but they wish the FCC to be the sole issuer of these calls. If the FCC decides, that it wishes to do this, and they can't do this themselves, the the ARRL believes that the ARRL should handle this function and only the ARRL should do this.

The FCC forum was hosted by Mr. Vincent Kajunski, the FCC Engineer in Charge in New England. He highlighted various topics that he thought were of concern for the amateur radio service. He said that at present, the FCC being very lenient on matters pertaining to packet radio. But in about 18 to 20 months from July, they would begin enforcing some rules strictly on packet users. He took issue mostly with 3rd party traffic rules to other countries and the fact that some ITU agreements are being breached by packet operators by digipeating through foreign stations. He suggested that amateurs determine what 'good amateur practice' is in relation to packet operations in the 18-20 month period, lest some more restrictive rules be set in place. The discussion went briefly to 'TV Genies' that retransmit tv pictures in the home to other tv sets when connected to VCR's. Mr. Kajunski had already spoken to some people in the flea market area, and asked them to remove them from display. These are illegal devices. He also discussed ATIS, Automatic Transmitter Identification System. A system in which all transmitters would have a automatic identifier. He expected voluntary use of these devices in the early 1990's would be possible in the amateur service, and required use of these for other radio services within a year. Much of the discussion revolved around how and what the FCC does when interference is reported to them. Presently, all amateur interference matters are handed to the amateur auxilliary for resolution but they can be elevated again to the FCC.

Mr. Kajunski's was perhaps the most interersting talk I saw. He seemed to take reasonable approaches to solving the problems that the FCC in faced with. Unlike what you might be faced with from government burocracy from time to time, by his mannerisms and approaches to various problems, I'd think that one would certainly get a fair shake from him.

Other rumors :

- The East Coast Amateur TV club is actually getting their new ATV repeater (actually a linear translator) on this fall with 911.25 in and 434.25 (?) out from one of the large TV towers in Needham.
- N1EHM bought yet another 6m radio (presumably to do some AM).
- N1ADY will be doing more target shooting shortly.